

WEATHER OF THE ATLANTIC AND PACIFIC OCEANS

[The Marine Division, W. F. McDONALD in charge]

NORTH ATLANTIC OCEAN

By H. C. HUNTER

Atmospheric pressure.—The pressure during October 1934 averaged somewhat greater than normal over the eastern portion of the North Atlantic Ocean to southward of the vicinity of Ireland, but decidedly below normal in the regions adjacent to Scotland and Iceland. The western half of the ocean had pressure lower than normal nearly everywhere save to southward of the 25th parallel of latitude. The pressure at Bermuda was comparatively low for a while just before the middle of the month, and again from the 20th to the 28th. Farther eastward the semipermanent anticyclone was well developed except at times during the final 10-day period.

The highest pressure reported by a vessel was 30.71 inches, by the *American Importer*, about latitude 50° N., longitude 29° W., during the forenoon of the 16th. The lowest reading was 28.49 inches, about 10 p. m. of the 21st, by the British steamship *Caledonia*, near 55° N., 14° W.

TABLE 1.—Averages, departures, and extremes of atmospheric pressure (sea level) at selected stations for the North Atlantic Ocean and its shores, October 1934

Stations	Average pressure	Departure	Highest	Date	Lowest	Date
	Inches	Inch	Inches		Inches	
Julianehaab, Greenland	29.72	—	30.16	30	29.14	9
Reykjavik, Iceland	29.57	—0.11	30.51	15, 30	28.79	7
Lerwick, Shetland Islands	29.52	— .27	30.18	16	28.87	28
Valencia, Ireland	29.97	+ .06	30.52	16	28.89	4
Lisbon, Portugal	30.13	+ .11	30.39	6	29.94	23
Madeira	30.03	+ .04	30.22	5, 6	29.64	31
Horta, Azores	30.17	+ .06	30.40	17	29.46	24
Belle Isle, Newfoundland	29.84	— .03	30.28	24	28.94	8
Halifax, Nova Scotia	29.93	— .11	30.54	5	29.34	27, 28
Nantucket	29.96	— .09	30.47	5	29.42	26
Hatteras	30.04	— .02	30.32	17	29.65	27
Bermuda	29.98	— .09	30.18	29, 30	29.62	13, 24
Turks Island	29.95	.00	30.07	7	29.85	23, 24
Key West	29.96	+ .02	30.19	30	29.78	13
New Orleans	30.03	.00	30.32	28	29.76	5

NOTE.—All data based on a. m. observations only, with departures compiled from best available normals related to time of observation, except Hatteras, Key West, Nantucket, and New Orleans, which are 24-hour corrected means.

Extra-tropical cyclones and gales.—An unusually large number of reports of gales encountered outside tropical waters have come to hand, but in only two instances was the force of the wind greater than Beaufort 10. The earlier case was late on the 1st, when the Norwegian motorship *Slemmestad*, bound from Copenhagen to Montreal, was about 300 miles northeast of the Straits of Belle Isle, and met force 12 from the west-southwest. A well-developed low was moving northeastward from Labrador to southern Greenland, but so far to the northwest that vessels along the chief steamship lanes were but little affected.

Four days later a well-marked storm was centered about midway between Labrador and the Shetland Islands (see chart VIII). Strong gales and low pressure readings were noted by many vessels in mid-Atlantic waters near or to northward of the fiftieth parallel. The center of this storm advanced to northeastward on the 6th and crossed Iceland the following day.

For almost a fortnight after the 6th no important gales were encountered in North Atlantic waters. On the 20th,

however, a low had attained considerable strength to southeastward of New England and it increased in energy during the following days as it traveled eastward close to the chief steamship lanes. The second instance of force over 10 was connected with this storm; the American steamship *Syros*, from Galveston for Havre, noted storm wind (force 11) when near 49° N., 18° W. on the 24th. Shortly before it reached the British Isles, this low turned sharply to northward and on the 26th merged with another disturbance near Iceland.

On the forenoon of the 26th a cyclone that was, as yet, of comparatively small importance was centered near New York City, whence it moved first eastward with much increase of energy, then northward and later even to west of northward till near the northeastern corner of Hudson Bay. This storm caused widespread gales on the 26th and 27th in the area included between the coasts and lines drawn from Bermuda to Hatteras and to eastern Newfoundland. The situation on the 27th appears on chart IX. Several vessels close to Nova Scotia recorded pressures below 29 inches on that date.

Tropical storms.—Three interesting storms were noted within or comparatively close to tropical waters during the first week; none, however, seems to have attained great importance and in each of two cases only one vessel has furnished a report, so that small size and brief existence are probable.

The Dutch motorship *Selene*, about midnight of the 1st-2d, encountered a whole gale from the north, when near 29° N., 42° W. A period of calm ensued for about 50 minutes, the pressure being as low as 29.06 inches, then a southerly whole gale came, followed by lessening wind and rapid rise of barometer.

On the forenoon of the 2d pressure was moderately below normal at the Yucatan Channel; and a storm center traveled thence slowly northwestward into the Gulf of Mexico and later turned northeastward. The situation on the 5th appears on chart VIII. During the following night the center reached the coast line near Pensacola, Fla. No report concerning this storm shows great energy or marked damage, but several vessels encountered gales of forces 8 to 10.

About mid-day of the 7th, the French steamship *Eliane L. D.*, bound from Cape Verde Islands to Buenos Aires, encountered a vigorous but brief storm, with marked shift of wind, when in 9° N., 28° W. The lowest pressure noted was only 29.82 inches.

Fog.—Fog was mainly less frequent in occurrence during October than it had been during September, notably along the American coast from Hatteras to the Gulf of St. Lawrence, and eastward to include the region of the Grand Banks. There were, however, several 5° squares within which it was encountered on 5 or 6 days, most commonly about the middle of the month, when gales were notably infrequent.

From the fortieth meridian eastward to the vicinity of Ireland, there was somewhat more fog in October than there had been during the preceding month, although no area here has furnished reports of occurrence on more than 5 days. On the main steamship lanes near the twenty-fifth meridian there was more fog than is normally encountered in October in that locality.